IN THE CLAIMS:

The following listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Currently Amended) A computer-implemented method for creating a graphical program that performs a numerical function, the method comprising:

displaying a node in a graphical program in response to user input, wherein the node is operable to perform a first numerical function;

configuring the node to receive data values, in response to user input;

configuring the node with criteria information in response to user input, wherein the criteria information indicates that the ~~to perform a~~ first numerical function is to be performed on ~~at least~~ a subset, but not all, of the ~~received~~ data values received by the node~~, in response to user input~~;

executing the graphical program;

the node receiving a plurality of data values during execution of the graphical program, wherein the node maintains state information regarding the received data values;

the node determining a first data collection on which to perform the first numerical function based on the criteria information and the state information, wherein the first data collection comprises ~~at least~~ a subset, but not all, of the plurality of data values received; and

the node performing the first numerical function on the first data collection.[[;]]

~~wherein the node maintains state information regarding received data values and uses the state information to determine the data collection on which to perform the numerical function.~~

2. (Currently Amended) The method of claim 1, further comprising:

receiving user input requesting to specify configuration information for the node;

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displaying a graphical user interface (GUI) for specifying configuration information for the node, in response to the user input requesting to specify configuration information for the node;

wherein said configuring the node <u>with criteria information in response to user input comprises configuring the node with the criteria information</u> ~~to perform the numerical function on at least a subset of the received data values is performed~~ in response to user input received via the GUI.

3. (Currently Amended) The method of claim 1,

~~wherein the GUI is useable for specifying a collection mode for the node;~~

~~wherein the collection mode determines the at least a subset of the received data values on which to perform the numerical function.~~

<u>wherein the node is configurable with a plurality of collection modes, wherein each collection mode defines a subset of received data values on which to perform the first numerical function;</u>

<u>wherein said configuring the node with the criteria information in response to user input comprises configuring the node with a first collection mode in response to user input selecting the first collection mode from the plurality of collection modes;</u>

<u>wherein said node determining the first data collection based on the criteria information and the state information comprises the node determining the first data collection based on the first collection mode and the state information.</u>

4. (Currently Amended) The method of claim 3,

wherein the <u>node is configurable with</u> ~~GUI enables~~ one or more of the following collection modes ~~to be specified for the node~~:

Sliding Block; <u>and</u>

Fixed Block<u>.</u> ~~; and~~

~~Always.~~

5. (Original) The method of claim 1,

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wherein the node is a primitive node provided by a graphical programming development environment for inclusion in the graphical program.

6. (Currently Amended) The method of claim 1,

wherein the <u>first</u> numerical function performed on the <u>first</u> data collection comprises one of:

a numerical average function;

a summation function;

a minimum value function;

a maximum value function.

7. (Currently Amended) The method of claim 1,

wherein said configuring the node to receive data values comprises connecting <u>a</u> <u>wire to</u> an input terminal of the node [[to]] <u>from</u> an output terminal of another node in the graphical program, in response to user input[[.]] <u>;</u>

<u>wherein said node receiving the plurality of data values during execution of the</u> <u>graphical program comprises the node receiving the plurality of data values via the wire</u> <u>connected to the input terminal of the node.</u>

8. (Canceled)

9. (Currently Amended) A memory medium for creating a graphical program that performs a numerical function, the memory medium comprising program instructions executable to:

display a node in a graphical program in response to user input<u>, wherein the node</u> <u>is operable to perform a first numerical function</u>;

configure the node to receive data values, in response to user input;

configure the node <u>with criteria information in response to user input, wherein the</u> <u>criteria information indicates that the</u> ~~to perform a~~ <u>first</u> numerical function <u>is to be</u> <u>performed</u> on ~~at least~~ a subset<u>, but not all,</u> of the ~~received~~ data values <u>received by the</u> <u>node</u>~~, in response to user input~~;

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wherein during execution of the graphical program, the node is operable to:

receive a plurality of data values;

maintain state information regarding the received data values;

determine a <u>first</u> data collection on which to perform the <u>first</u> numerical function <u>based on the criteria information and the state information</u>, wherein the <u>first</u> data collection comprises ~~at least~~ a subset<u>, but not all,</u> of the <u>plurality of</u> data values received; <u>and</u>

perform the <u>first</u> numerical function on the <u>first</u> data collection.<u>.</u>[[;]]

~~maintain state information regarding received data values and use the state information to determine the data collection on which to perform the numerical function.~~

10. (Currently Amended) The memory medium of claim 9, further comprising program instructions executable to:

receive user input requesting to specify configuration information for the node;

display a graphical user interface (GUI) for specifying configuration information for the node, in response to the user input requesting to specify configuration information for the node;

wherein said configuring the node <u>with criteria information in response to user input</u> comprises configuring the node <u>with the criteria information</u> ~~to perform the numerical function on at least a subset of the received data values is performed~~ in response to user input received via the GUI.

11. (Currently Amended) The memory medium of claim 9,

~~wherein the GUI is useable for specifying a collection mode for the node;~~

~~wherein the collection mode determines the at least a subset of the received data values on which to perform the numerical function.~~

<u>wherein the node is configurable with a plurality of collection modes, wherein each collection mode defines a subset of received data values on which to perform the first numerical function;</u>

wherein said configuring the node with the criteria information in response to user input comprises configuring the node with a first collection mode in response to user input selecting the first collection mode from the plurality of collection modes;

wherein said node determining the first data collection based on the criteria information and the state information comprises the node determining the first data collection based on the first collection mode and the state information.

12. (Currently Amended) The memory medium of claim 11,

wherein the node is configurable with GUI enables one or more of the following collection modes to be specified for the node:

Sliding Block; and

Fixed Block. ; and

Always.

13. (Original) The memory medium of claim 9,

wherein the node is a primitive node provided by a graphical programming development environment for inclusion in the graphical program.

14. (Currently Amended) The memory medium of claim 9,

wherein the first numerical function performed on the first data collection comprises one of:

a numerical average function;

a summation function;

a minimum value function;

a maximum value function.

15. (Currently Amended) The memory medium of claim 9,

wherein said configuring the node to receive data values comprises connecting a wire to an input terminal of the node [[to]] from an output terminal of another node in the graphical program, in response to user input[[.]] ;

wherein said node receiving the plurality of data values during execution of the graphical program comprises the node receiving the plurality of data values via the wire connected to the input terminal of the node.

16. (Canceled)

17. (New) The method of claim 1,

wherein the criteria information specifies a number of data values on which to perform the first numerical function;

wherein said node receiving the plurality of data values during execution of the graphical program comprises the node receiving a greater number of data values than the number of data values specified by the criteria information;

wherein the number of data values in the first data collection is equal to the number of data values specified by the criteria information.

18. (New) The method of claim 1,

wherein the node is further operable to perform a second numerical function;

wherein the method further comprises the node performing the second numerical function on the first data collection, in addition to performing the first numerical function on the first data collection.

19. (New) The method of claim 18,

wherein the node includes a first output terminal for outputting a result of performing the first numerical function on the first data collection and a second output terminal for outputting a result of performing the second numerical function on the first data collection.

20. (New) A memory medium for creating a graphical program that performs a numerical function, the memory medium comprising program instructions executable to:

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display a node in a graphical program in response to user input, wherein the node is operable to perform a first numerical function;

configure the node to receive data values, in response to user input; and

configure the node with information specifying a number N of data values on which to perform the first numeric function, in response to user input specifying the number N;

wherein during execution of the graphical program, the node receives a plurality of data values;

wherein each time the node receives a data value during execution of the graphical program, the node is operable to:

determine whether the node has received at least N data values; and

perform the first numerical function on the N most recently received data values if the node has received at least N data values.

21. (New) The memory medium of claim 20,

wherein the node is a primitive node provided by a graphical programming development environment for inclusion in the graphical program.

22. (New) A memory medium for creating a graphical program that performs a numerical function, the memory medium comprising program instructions executable to:

display a node in a graphical program in response to user input, wherein the node is operable to perform a first numerical function;

connect a wire to the node in response to user input, wherein connecting the wire to the node configures the node to receive data values via the wire; and

configure the node with information specifying a number N of data values on which to perform the first numeric function, in response to user input specifying the number N;

wherein during execution of the graphical program, the node receives a plurality of data values via the wire;

wherein the node is operable to:

determine when a first set of N data values have been received via the wire; and

perform the first numerical function on the first set of N data values.

23. (New) The memory medium of claim 22,

wherein the node is further operable to:

determine when a second set of N data values have been received, wherein the second set of N data values comprises N data values received after the first set of N data values; and

perform the first numerical function on the second set of N data values.

24. (New) The memory medium of claim 22,

wherein the node is a primitive node provided by a graphical programming development environment for inclusion in the graphical program.